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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,411	12/03/2001	Franklin Zhigang Zhang		3112

7590 05/19/2006  
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EXAMINER

PHAM, TITO QUANG

ART UNIT PAPER NUMBER

2616

DATE MAILED: 05/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/006,411	<b>Applicant(s)</b> ZHANG, FRANKLIN ZHIGANG	
	<b>Examiner</b> Tito Pham	<b>Art Unit</b> 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 March 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. Claims 22 and 24 are objected to because of the following informalities: wrong wording. The word "among" on line 2 of claim 24 should be corrected as "between" as the communication is taken place between two devices not three. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 17-20 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claim(s) must be in one sentence form only. Note the format of the claims in the patent(s) cited.

The first line of claims 17-20 should be "the system of claim 16".

3. Claims 18 and 22-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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- Regarding claim 18, the specification fails to demonstrate the functionality of each domains (Access, Host, and Control) and neglects to show inter-domain interaction as well as the interaction between domains and TDMN operation means. Core Domain is not mentioned in the specification.
- Claims 22-27 claim both system and method. It is unclear as to which category of subject matter is sought for protection.
- On line 1 of claim 26, it is unclear the meaning of "source date" as it is not defined in the specification. Also claim 19 (TDMU) is not part of the claiming tree.
- Regarding claims 23-26, there is no "method" claim in claim 21.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 16, 18, 21, 22, 25, and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Rai et al. (US Patent 6,421,714 B1) (hereinafter Rai)

- Regarding claim 16, Rai discloses a system of Internet based time distributed two-way personal mobile communication (figure 2), comprising:

one Time Distributed Message Network (TDMN) running on Internet (figure 2 references 30);

a plurality of wireless Access Points (AP) connecting to Internet (figure 2 reference 36);

a plurality of Personal Mobile Access Device (PAMD) (figure 2 reference 32);  
Wherein said TDMN is a group of server means operating on Internet (figure 2 references 48, 50, and 52);

Wherein said wireless Access Point (AP) is a wireless networking device (column 7 lines 22-29);

Wherein said PAMD is personal mobile communication device with user and media interfaces (column 5 lines 55-57);

Wherein said PAMD comprising operational means to join said TDMN for communication via Internet connection (column 5 lines 55-60);

Wherein one of said a plurality of PAMD is communicating with remote other one of said a plurality of PAMD via said TDMN (figure 2, column 8 lines 21-23, 30-32);

Wherein said TDMN manages communication among said a plurality of PAMDs (figure 2 reference 50, column 6 lines 26-30); and

Wherein said TDMN and said a plurality PAMDs running correspondent operation means for joining network and communication (column 6 lines 2-5, 38-52).

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- Regarding claim 18, all parent limitations are disclosed above. Rai further teaches TDMN comprising Access Domain and Core Domain and TDMN operation means;  
wherein said Access Domain comprising a plurality of Access Servers (AS) connecting to Internet (figure 2 references 52 and 48);  
wherein further said Access Servers are connecting to a plurality of Access Point (AP) via Internet (figure 2 reference 44);  
wherein said Core Domain managing the communication among Access Domains (column 6 lines 26-30);  
wherein said Core Domain comprising servers with Internet connections (figure 2 reference 52);  
wherein said TDMN operation means managing the operation of said TDMN and a plurality of PAMDs (figure 2 reference 52, 48, and 50, column 6 lines 25-30); and  
wherein said TDMN operation means manage the message communication among said PAMDs in time distributed method (figure 2 reference 52, 48, and 50, column 6 lines 25-30, it is inherent that communication is time distributed);
- Regarding claims 21 and 27, all parent limitations are disclosed above. Rai further discloses a plurality of PAMDs can perform group communication (figure 2 reference 32, as seen in the figure the end systems communicates with each other in the group of 2 or more).

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- Regarding claim 22, Rai discloses a method of time distributed two-way mobile message communication over Internet comprising:

operating TDMN, wherein said TDMN operation means control the access of a plurality of PAMDs (figure 2 reference 36, column 7 lines 22-29, 35-42), wherein TDMN manages the communication among said PAMDs (figure 2 reference 30, column 6 lines 25-30), wherein said TDMN operation means ensure message exchange among said PAMDs (figure 2 reference 30, column 6 lines 20-37),

having first of said a plurality of PAMDs networking wirelessly to one of a plurality of APs to establish Internet connection and then join said TDMN (column 5 lines 55-60),

having second of said a plurality of PAMDs networking wirelessly to one of said a plurality of APs to establish Internet connection and then join said TDMN (column 5 lines 55-60),

establishing communication between said first and second PAMD via said TDMN, and communicating messages between said first and second PAMD via said TDMN (figure 2 references 32, column 7 lines 35-50, it is inherent that mobile device utilizes its software to communicate with each other).

- Regarding claim 25, all parent limitations are disclosed above. It is inherent that the TDMN means control and ensure the sending and receiving of messages among plurality of PAMDs as part of network operations.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 17 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rai et al. (US Patent 6,421,714 B1) (hereinafter Rai) in view Josse (US Patent 6,259,925 B1).

Regarding claims 17 and 23, Rai discloses all parent limitations above. Rai does not disclose TDMN operation means storing the undelivered message when the communication of receiving PAMD to said TDMN is interrupted; and Whereby, said TDMN operation means continue delivering said undelivered message when the interrupted communication of said receiving PAMD to said TDMN reestablishes.



However, Josse teaches storing the undelivered message when the communication of receiving device is interrupted (column 1 lines 20-29); and the network means continue delivering the undelivered message when the communication is reestablished (column 1 lines 34-41).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include in Rai a feature of storing the undelivered message when the communication is interrupted and redelivering the message when the communication is reestablished for the purpose of allowing more efficient utilization of connection resource and ensuring data reaches its destination.

9. Claims 19, 20, 24, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rai et al. (US Patent 6,421,714 B1) (hereinafter Rai).

- Regarding claims 19 and 24, all parent limitations are disclosed in the independent claim above. Rai does not teach the PAMD comprising data packing means of package data information into message units, and transmit and receive the said message units via Internet and the TDMN, wherein transmitting and receiving of said message units is time-distributed, and wherein said data packaging means package data source into a plurality of Time Distributed Message Units (TDMUs).

However, Examiner takes Official Notice that the data source is divided into plurality of Time Distributed Message Units and the communication is time distributed is conventional and well known.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the PAMDs package source data into plurality of Time Distributed Units and the communication is time distributed since Examiner takes Official Notice that the data source is divided into plurality of Time Distributed Message Units and the communication is time distributed is conventional and well known.

- Regarding claims 20 and 26, all parent limitations are disclosed in the independent claim above. Rai does not teach the PADM comprising:

means to convert the data resource to be transferred into TDMU;

means to convert the received TDMU into original format; and

means to control the communication with other PAMD

However, Examiner takes Official Notice that the PADM comprising means to convert data resource to be transferred into TDMU, means to convert the received TDMU into original format; and means to control the communication with other PAMD as conventional and well known. For example, the PAMD converts data text input by user to signal (TDMU) to transmit to the network. At the other end, the other PAMD converts received signal (TDMU) back to data text for viewing. Also the PAMD has the option of controlling the communication by start sending or stopping the communication. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include means to convert the data resource to be transferred into TDMU; means to convert the received TDMU into original format; and means to control the communication with other PAMD since However, Examiner takes Official Notice that

the PADM comprising means to convert data resource to be transferred into TDMU, means to convert the received TDMU into original format; and means to control the communication with other PAMD as conventional and well known.

### ***Response to Arguments***

10. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tito Pham whose telephone number is 571-272-8617. The examiner can normally be reached on 9-6 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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